

FIG. 1 (PRIOR ART)

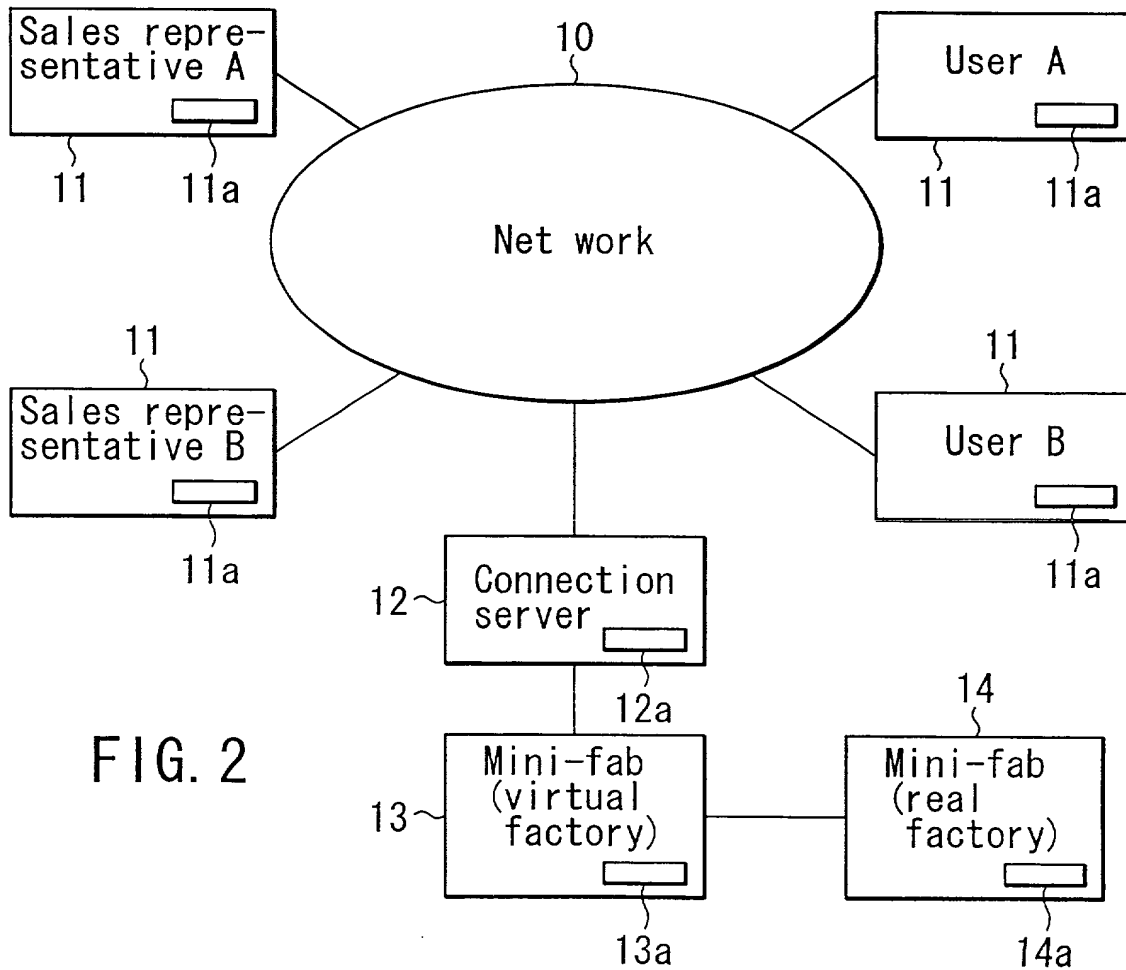


FIG. 2

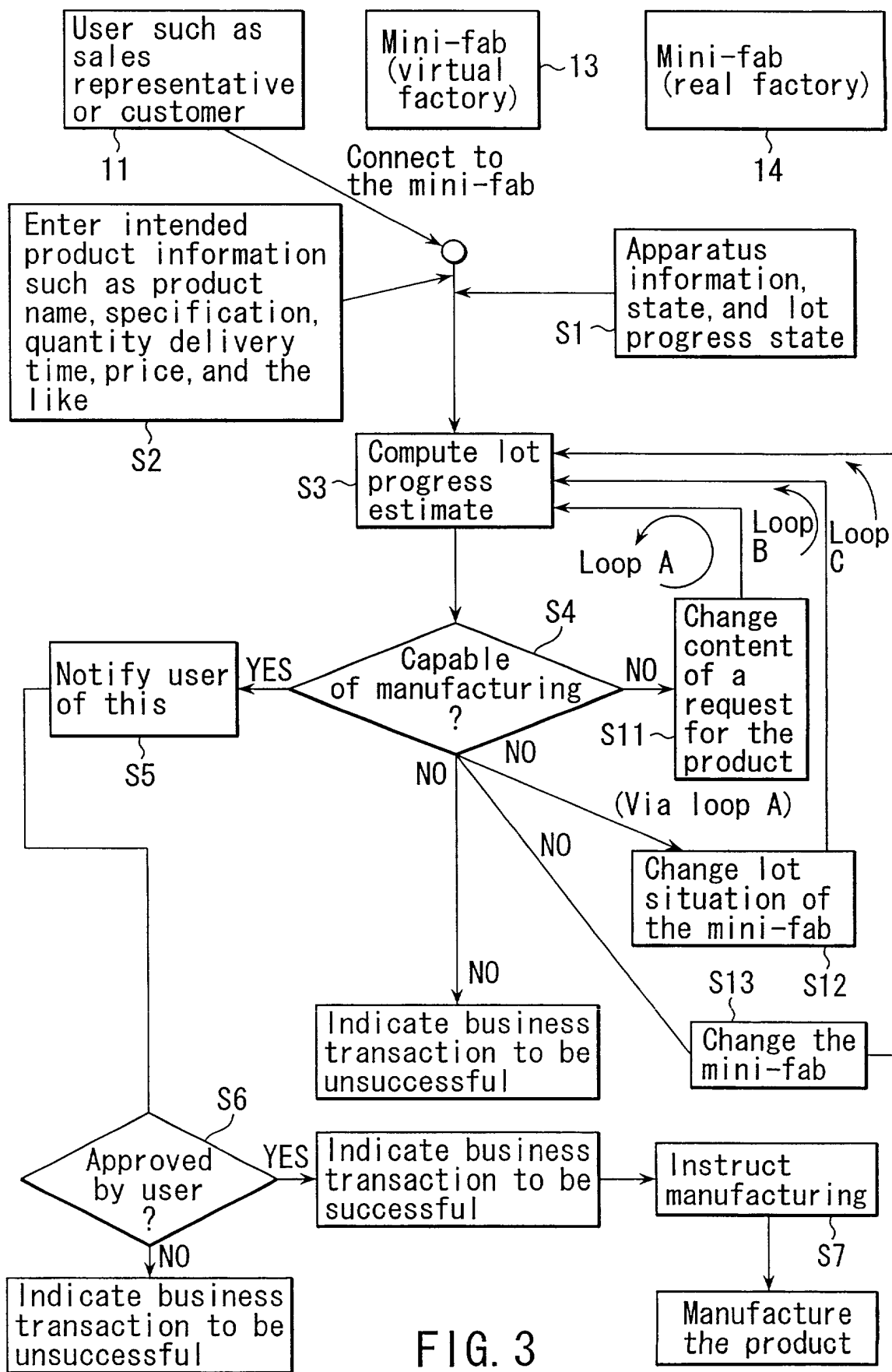


FIG. 3

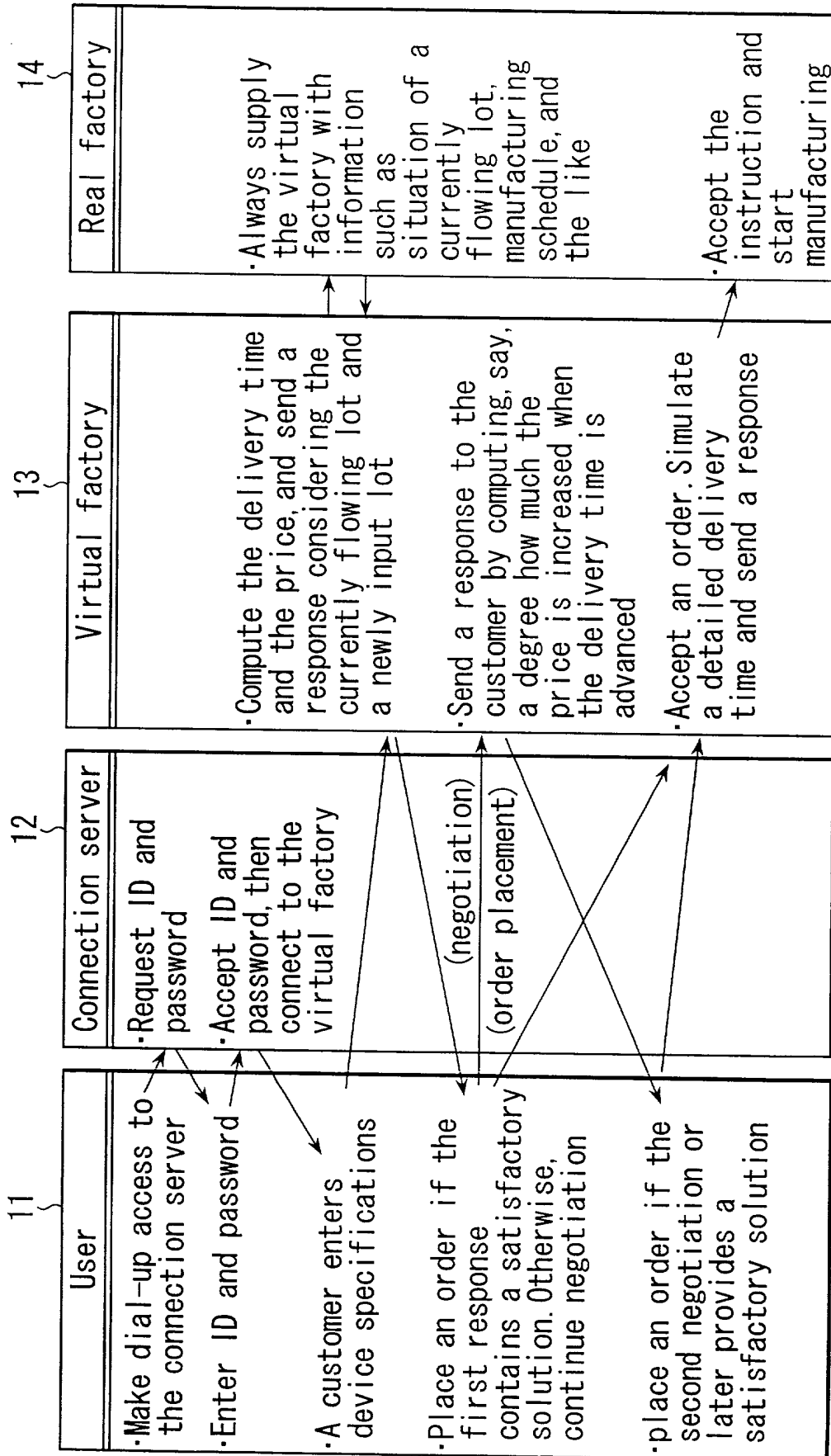


FIG. 4

Select the type of order placement.

(1) Specify device functions

(2) Specify device parts

FIG. 5

Estimated prices and delivery times are:

Quantity ordered	Unit price (\$)	Delivery time (days)
100	20	5
500	20	5
1000	18	7
2000	16	10
5000	15	15
10000	14	15
20000	12	15

Next

Cancel

FIG. 7

Enter functions needed for the system.

(1)

(2)

(3)

(4)

Next

Cancel

FIG. 6A

Select necessary parts.

(1) Logic Number of elements()
 Clock speed()MHz

(2) Memory Memory type()
 Integration()Mbit
 Operation mode()

(3) DSP ()

(4) Others ()

Next

Cancel

FIG. 6B

Enter the quantity and the delivery
time you want.

quantity: () items

Delivery: Month() Day()

FIG. 8

The delivery time and the price are estimated
as follows. When you place an order, click the
Order button. When you continue the negotiation,
click the Negotiate button.

Delivery: Month() Day() or proximity

Price: (\$ /item)

FIG. 9

Re-enter the quantity and the delivery time you want.

Desired delivery: Month() Day()

Desired price: (\$ /item)

FIG. 10

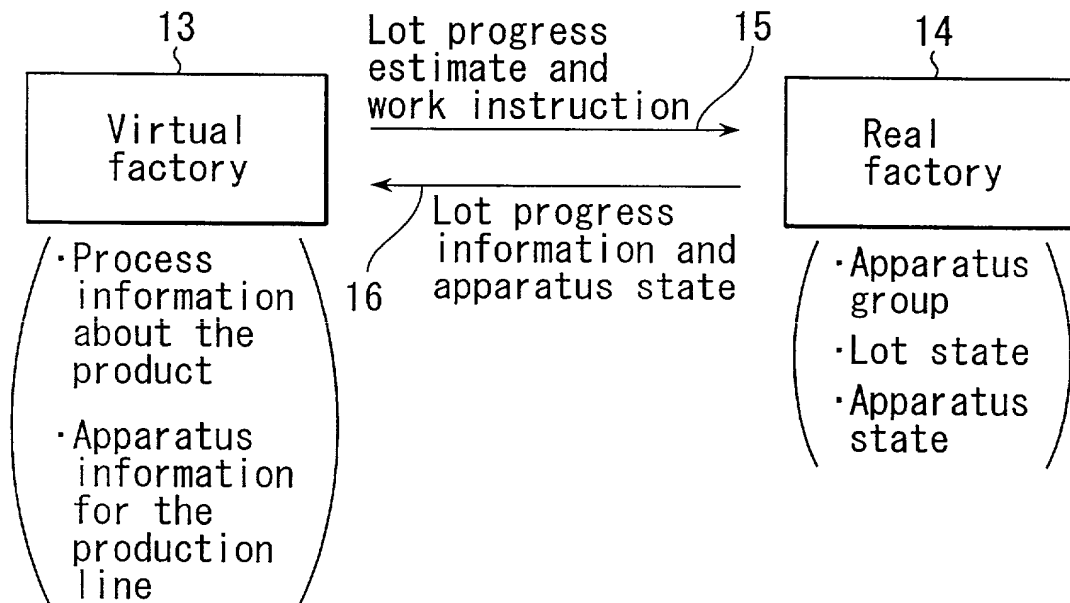


FIG. 11

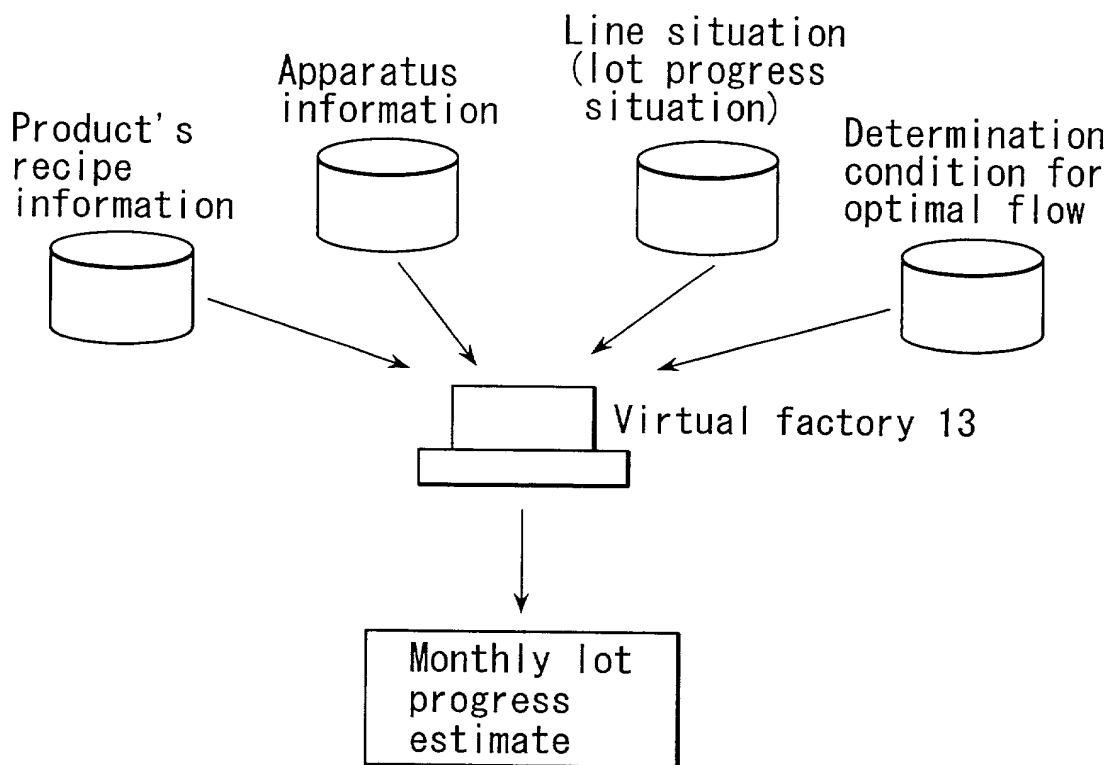


FIG. 12

Product A's recipe information
(Example)

Process No.	Process name	Apparatus	Processing time
1	Cleaning	Cleaning1	20
2	Oxidation	Diff1	90
3	Film thickness measurement	QC1	10
...

FIG. 13A

Apparatus information
(Example)

Apparatus No.	Apparatus name	Number of apparatuses	Apparatus name	Number of concurrently processible lots	Apparatus state
1	Cleaning1	1	Cleaning1	1	Operating(to be maintained after 30 hours and 20 minutes)
2	Diff1	2	Diff1#1	2	Operating(to be maintained after 50 hours and 10 minutes)
			Diff1#2	2	Maintenance in process(to be operated after 4 hours and 10 minutes)
3	QC1	1	QC1	1	Operating(to be maintained after 20 hours)
...

FIG. 13B

Lot progress situation
(Example)

Data and time:Year Month Day Hour Minute

Lot No.	Product	State
Lot110	Product A	Processing at Diff1(30 minutes after startup)
Lot111	Product B	Waiting at Cleaning1 for 30 minutes
...

FIG. 13C

Determination condition for optimal flow
(Example)

Priority	Content
(1)	Output amount:Maximum
(2)	Average work period:Minimum
(3)	...

FIG. 13D

Monthly lot progress estimate
(Example)

Lot No.	Process number	Apparatus	Lot transport time	Wait time	Start time	End time
Lot110	Process10	Equipment5#1	5Min	10Min	Apr. 10 13:10	Apr. 10 13:40
	Process11	Equipment7#2	10Min	0Min	Apr. 10 13:50	Apr. 10 14:10
	Process12	Equipment1#1	...	...	...	...

	Process300(last process)		...	...	...	Apr. 20 10:10
Lot110	Process20	Equipment2#1	15Min	0Min	Apr. 10 13:20	Apr. 10 13:40
	Process21	Equipment1#2	10Min	20Min	Apr. 10 14:10	Apr. 10 14:20
	Process22	Equipment3#1	...	...	...	...

	Process350(last process)		...	...	...	Apr. 22 10:10

FIG. 13E

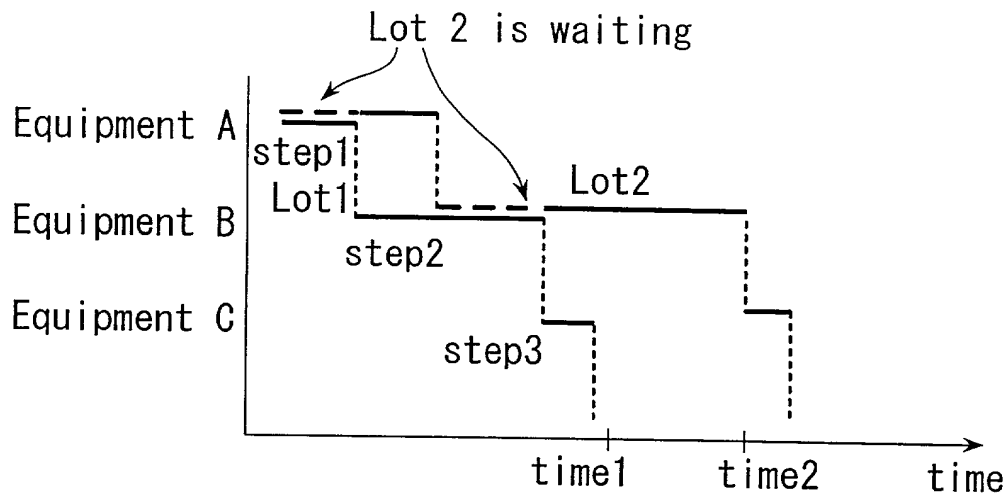


FIG. 14

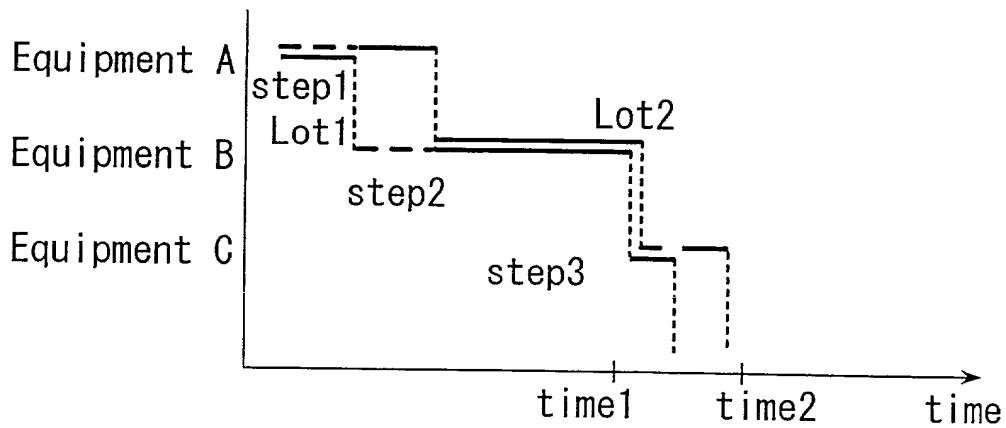


FIG. 16

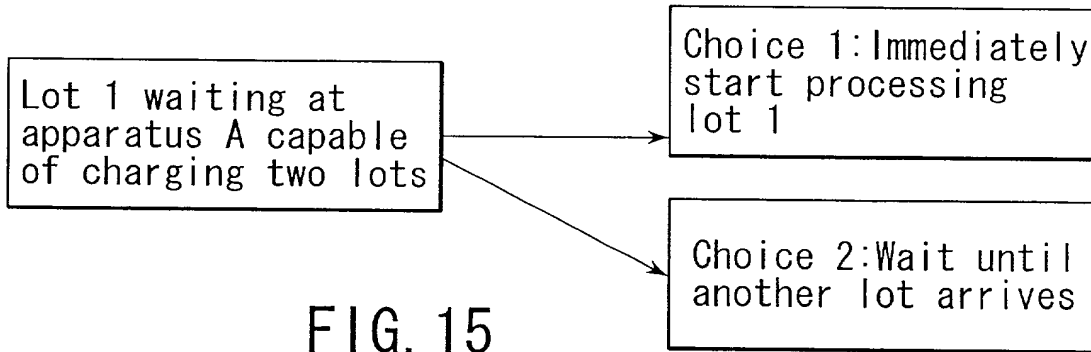


FIG. 15

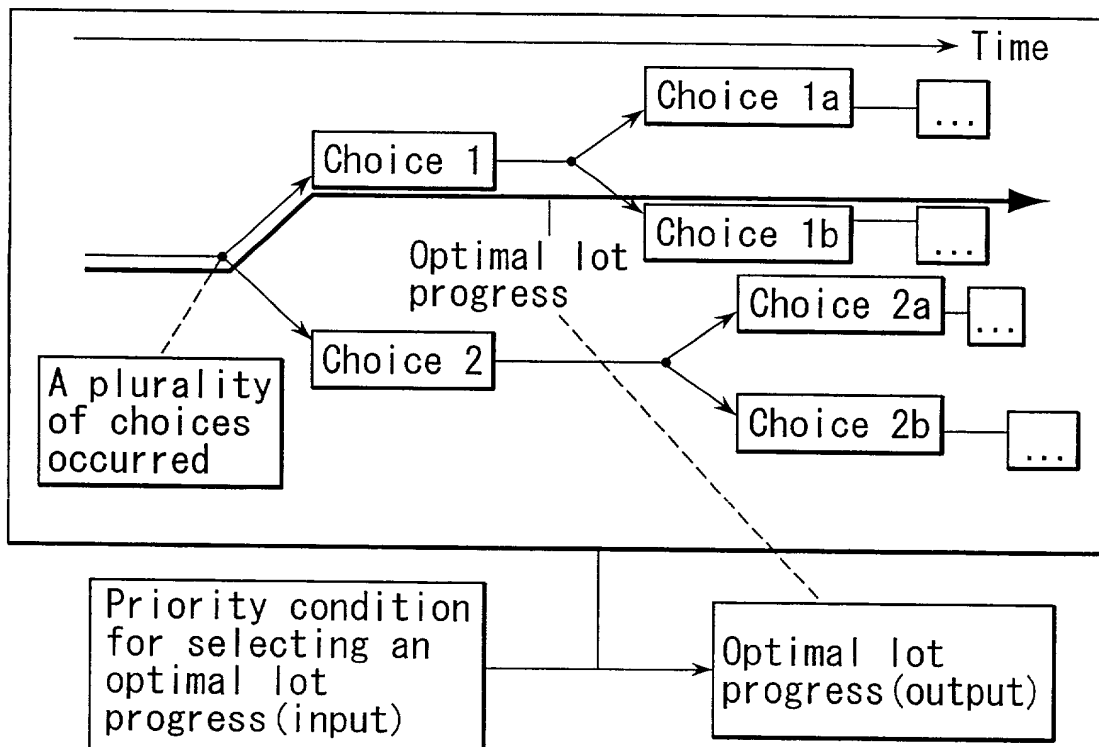


FIG. 17

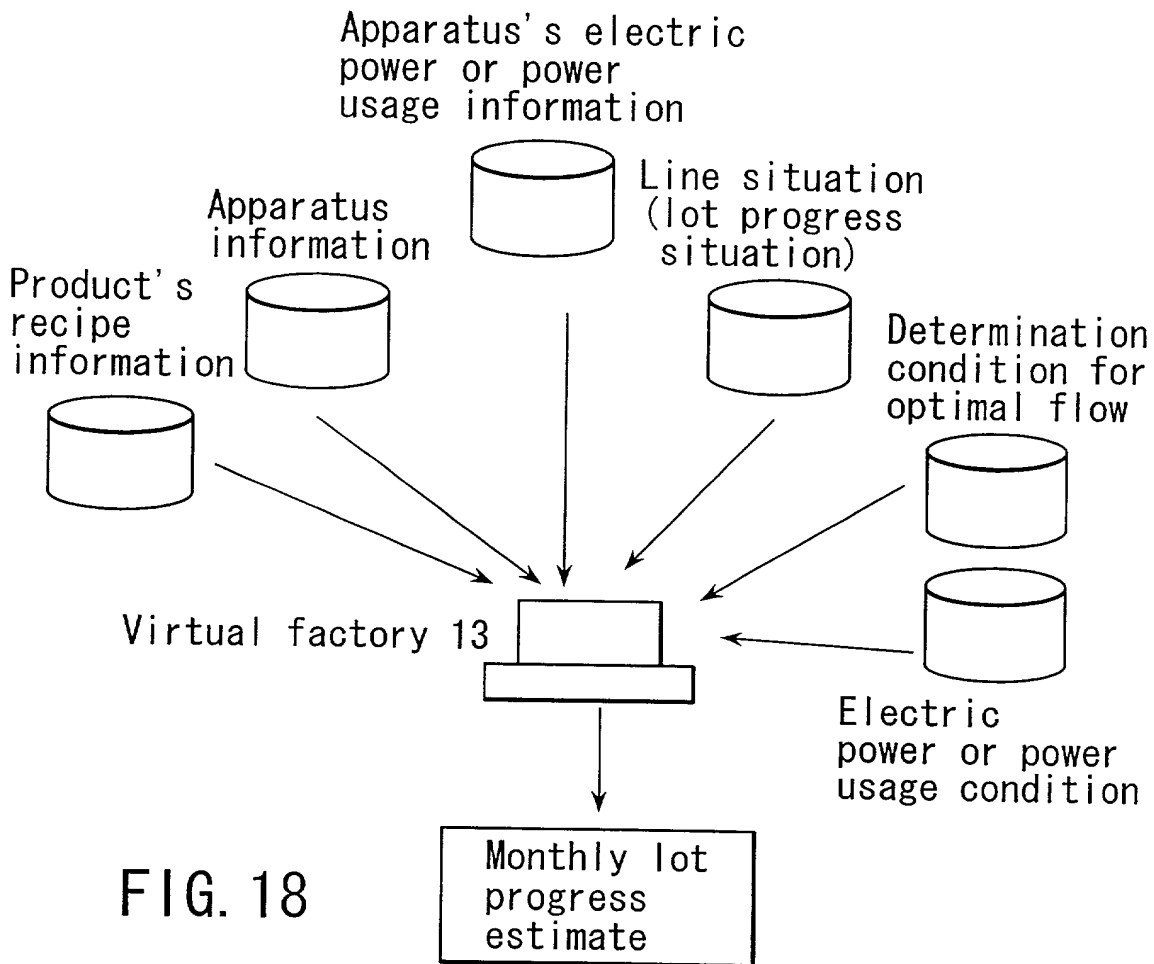


FIG. 18

<Example of electric power or power usage conditions>

Maximum power (total): 500kW

Maximum power (Group1): 150kW (Group1: Lithography)

Maximum power (Group2): 100kW (Group2: Diffusion furnace, RTA, LPCVD)

...

Maximum deionized water usage (total): 50 liter/min

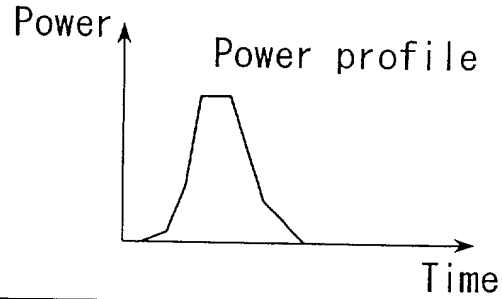
Maximum deionized water usage (Group3): 10 liter/min (Group3: CMP)

Maximum deionized water usage (Group4): 15 liter/min (Group4: Wet process)

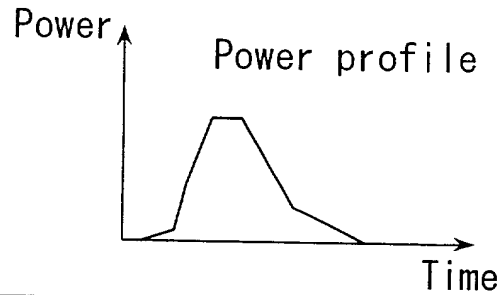
...

FIG. 20

Product name:Product A
Process name:Diffusion
process
Process number:30
Apparatus:Diff1

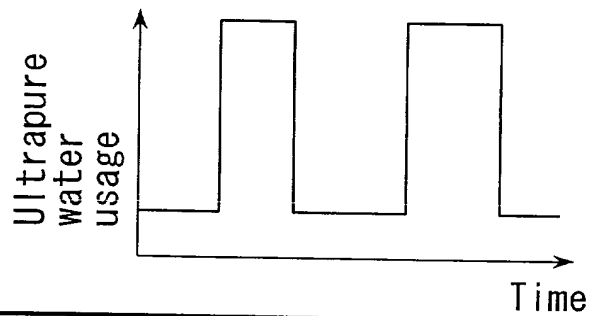


Product name:Product A
Process name:RTA process
Process number:50
Apparatus:RTA1



...

Product name:
Product A
Process name:Pre
-treatment
process
Process number:40
Apparatus:Cleaning1



...

FIG. 19

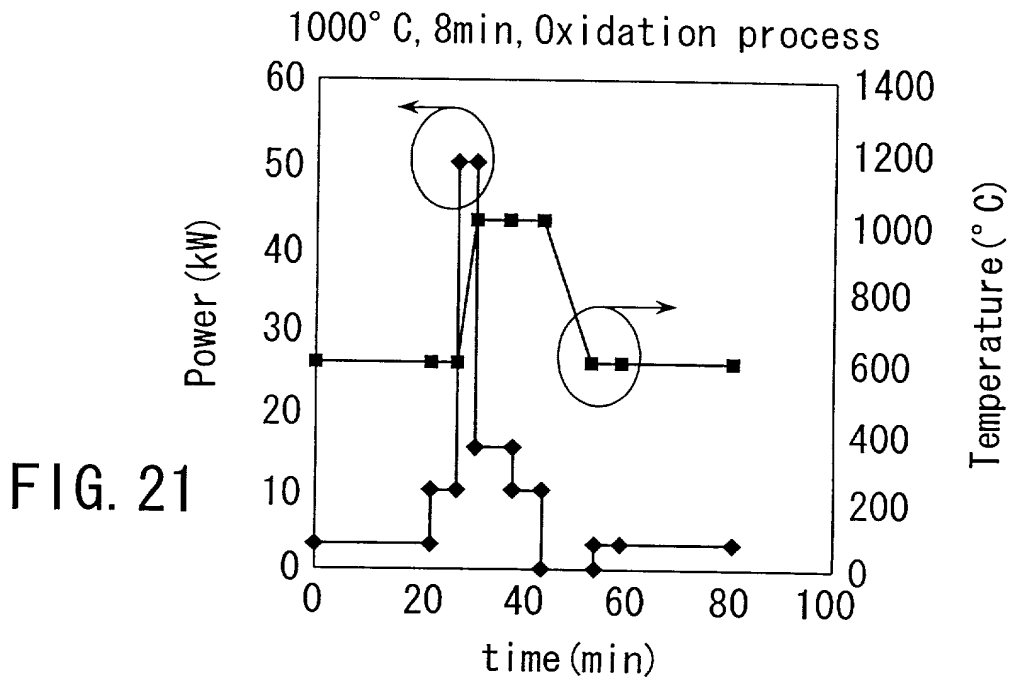


FIG. 21

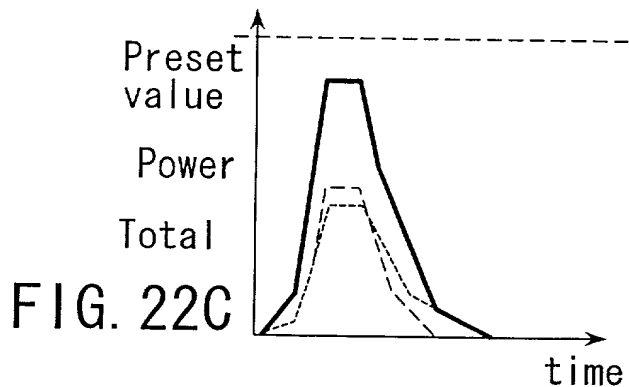
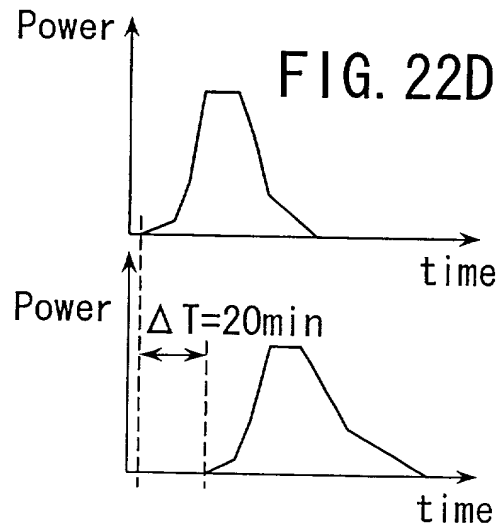
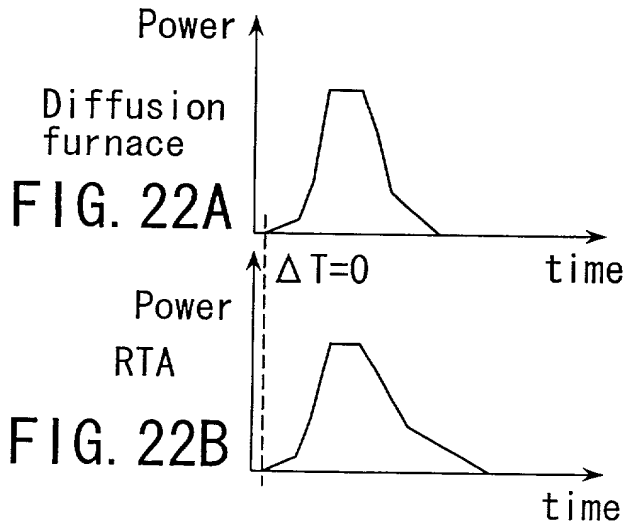


FIG. 22F

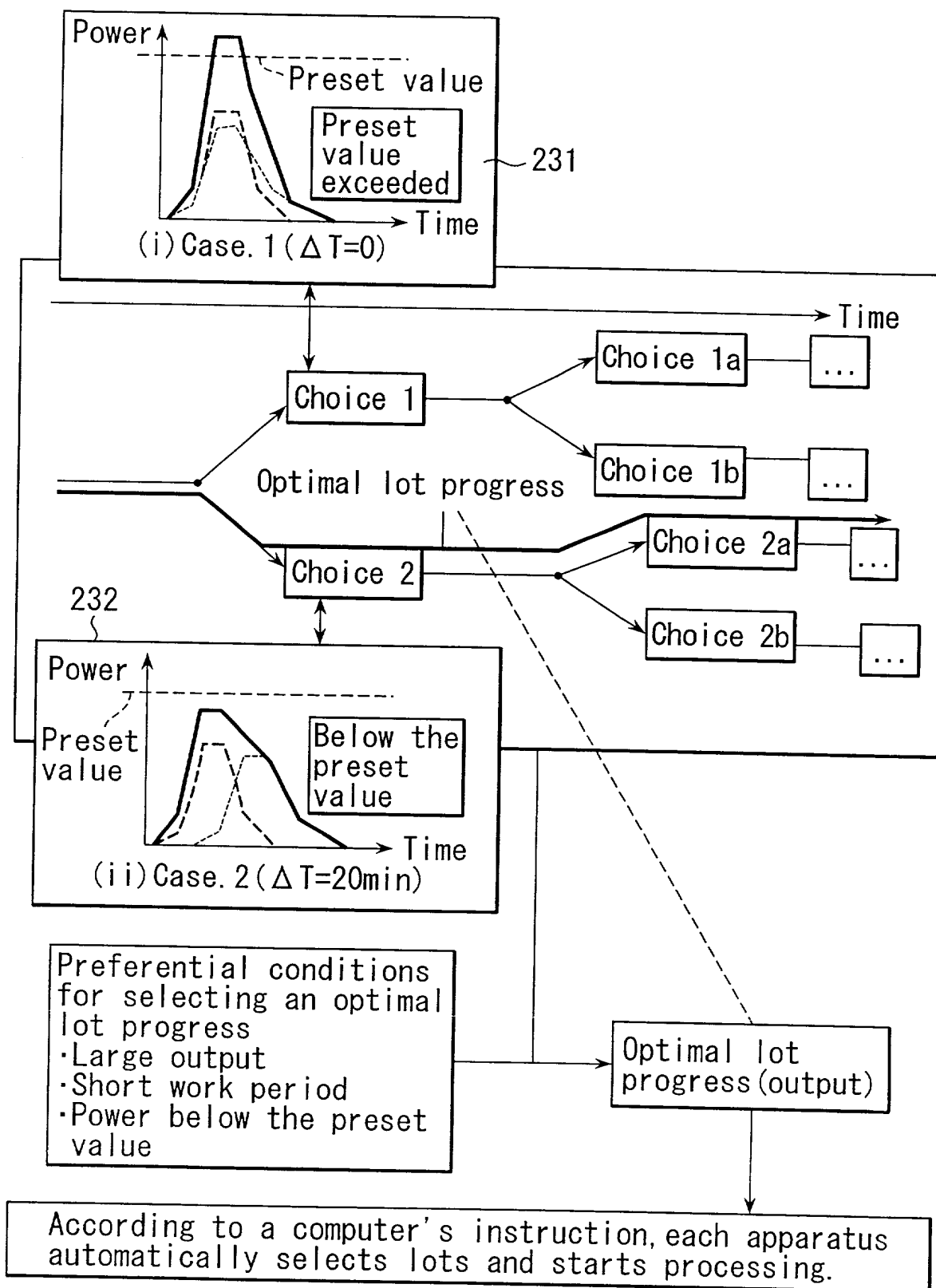
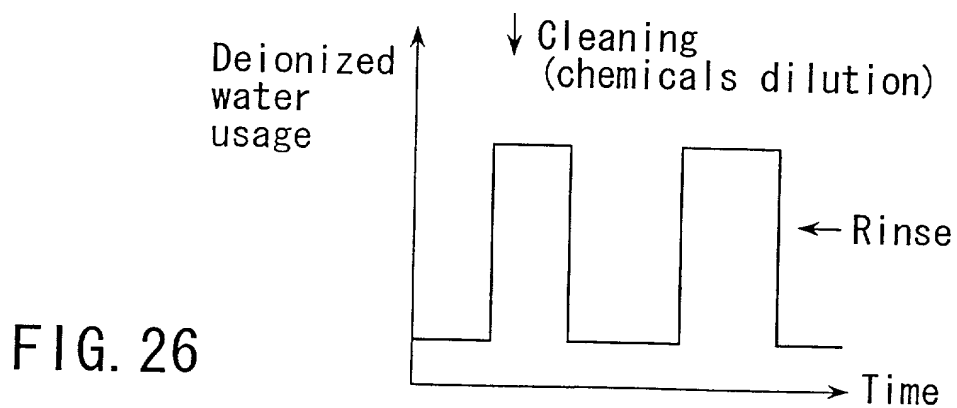
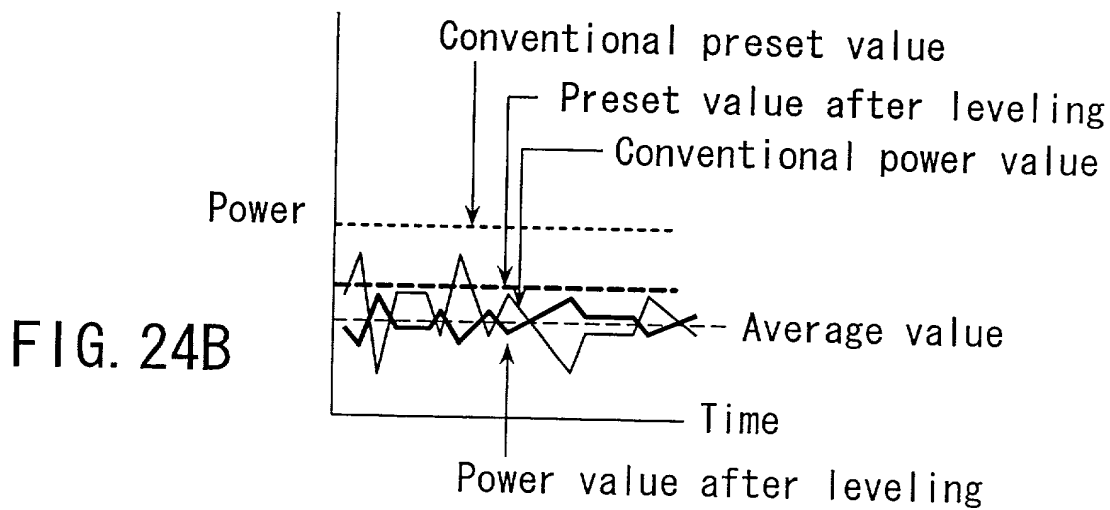
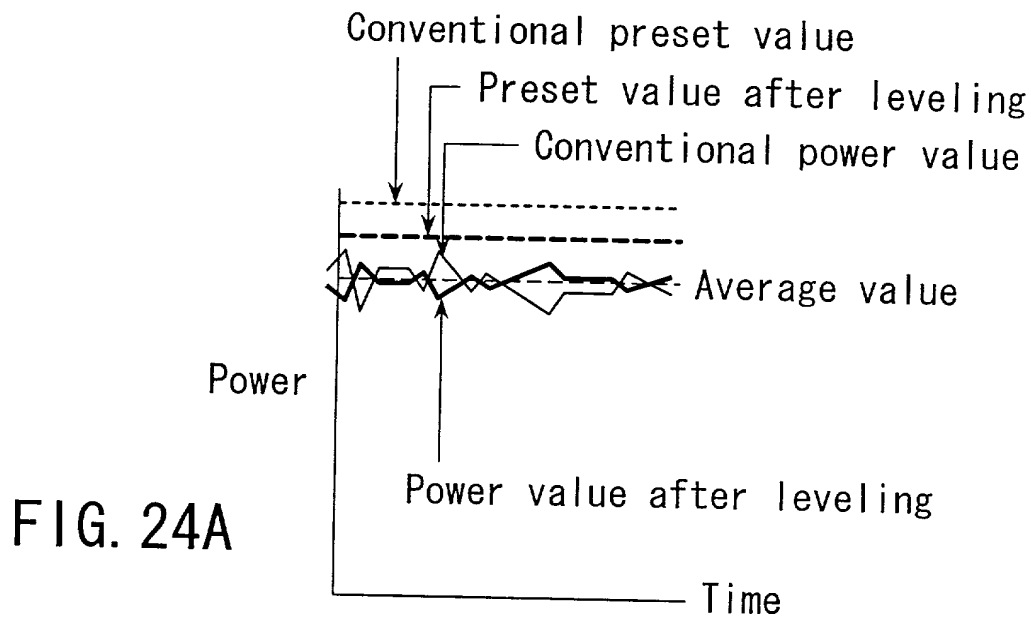


FIG. 23



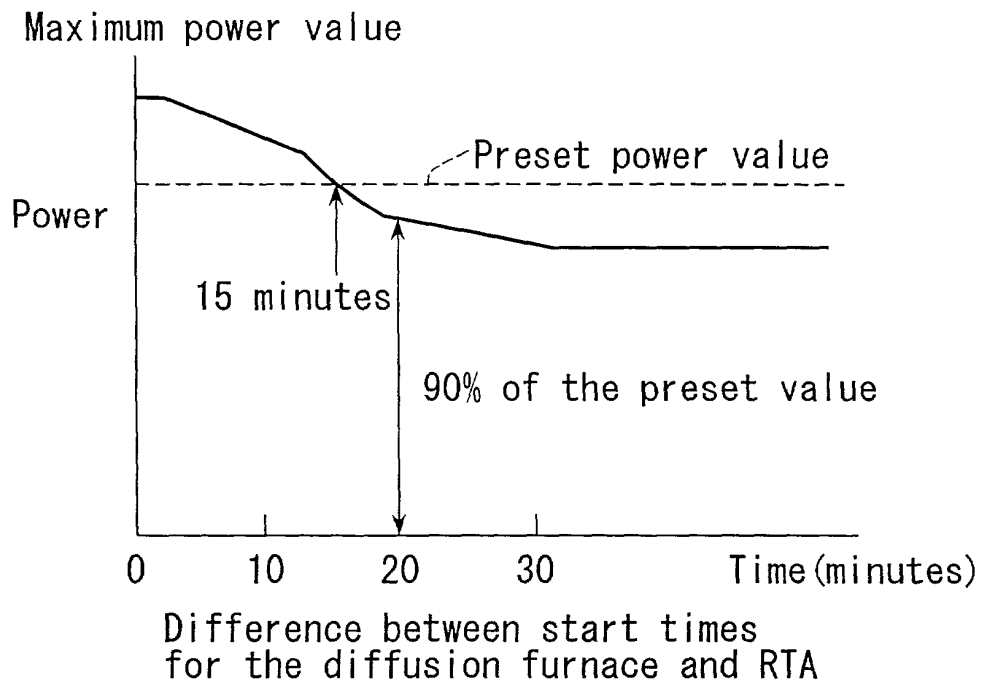


FIG. 25

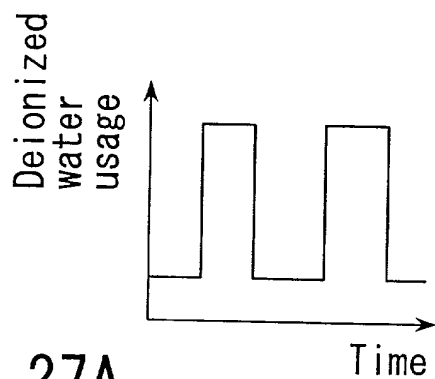


FIG. 27A

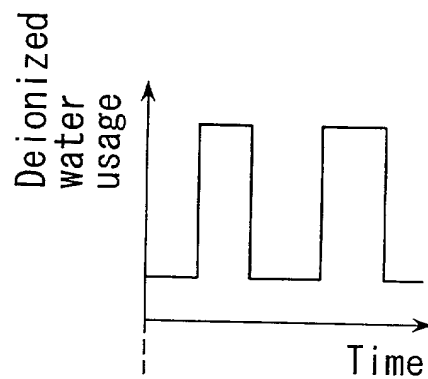


FIG. 27D

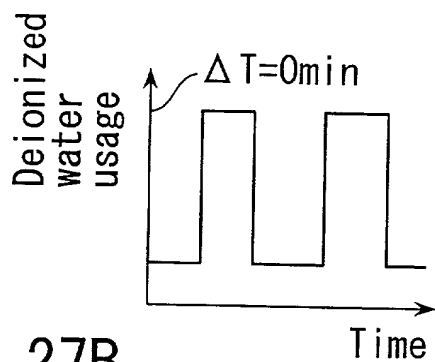


FIG. 27B

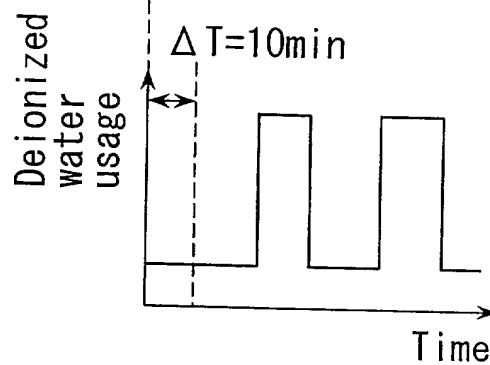


FIG. 27E

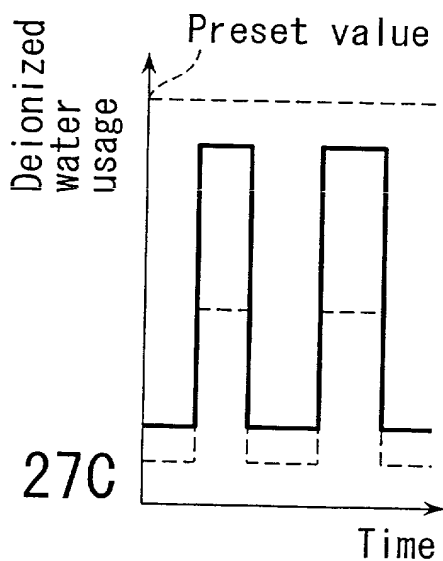


FIG. 27C

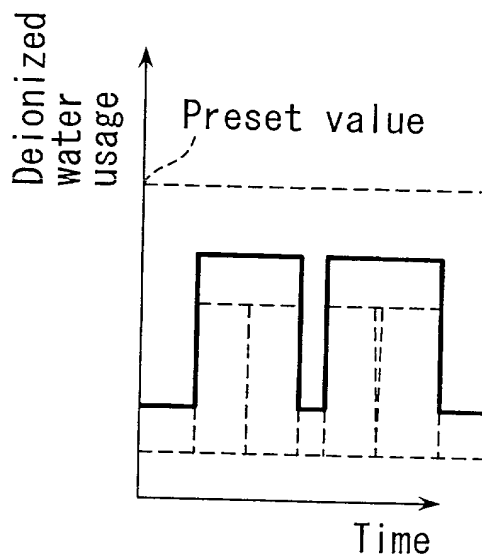


FIG. 27F

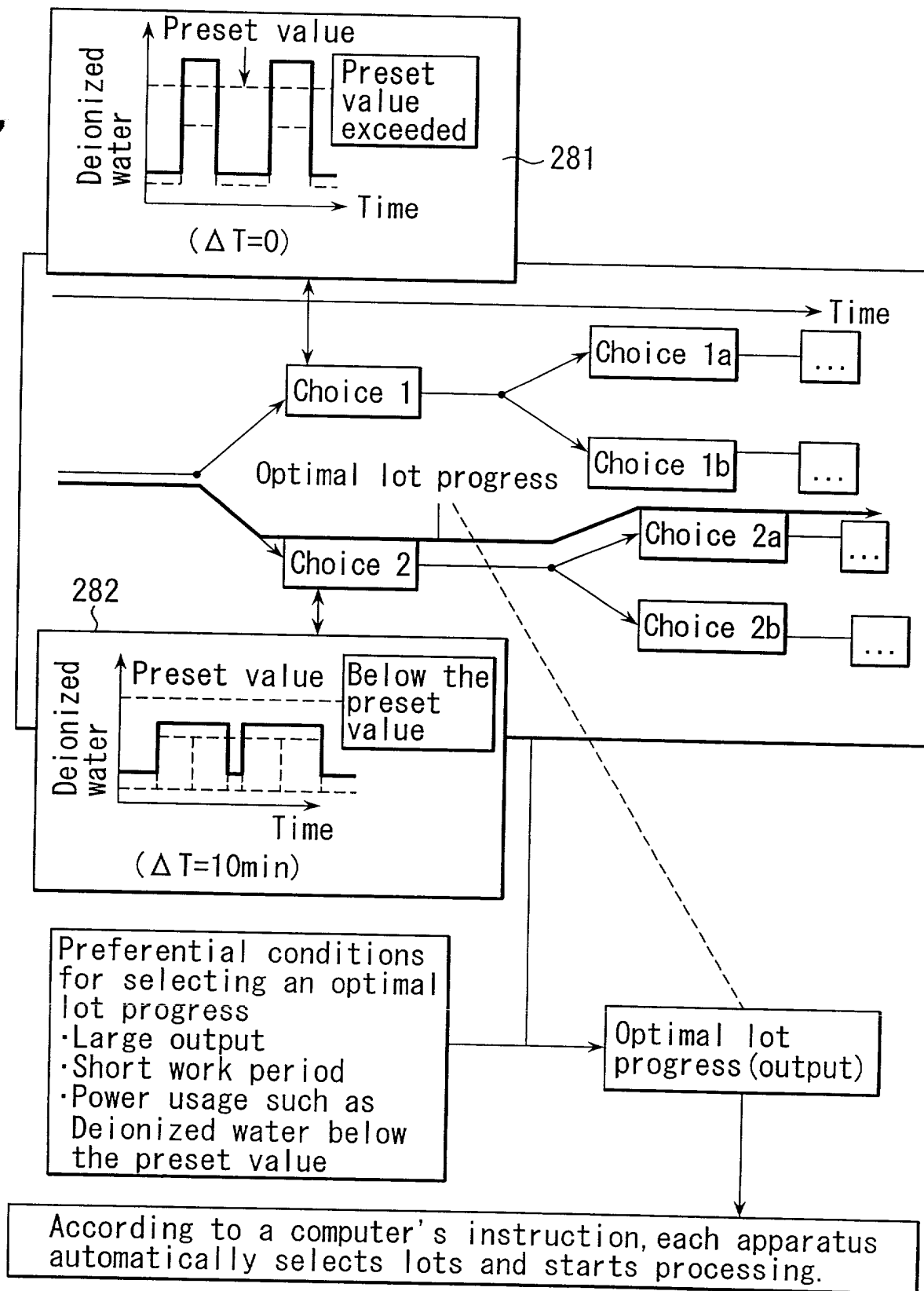


FIG. 28